DOCUMENT RESUME

ED 072 018 SP 006 086

AUTHOR Starky, John D.; Barr, Rita L.
TITLE The Philosophical Nature of Teachers--Graduate and Undergraduate.
PUB DATE [72]
NOTE 24p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Educational Philosophy; Educational Research; *Educational Theories; *Graduate Study; *Teacher Education; *Undergraduate Study
IDENTIFIERS *Ames Philosophical Belief Inventory

ABSTRACT

This study of the nature of the philosophical beliefs of graduate and undergraduate teacher education students compares secondary and elementary undergraduates, as well as secondary and elementary graduates, as to ontology, epistemology, and axiology. The Ames Philosophical Belief Inventory was administered to 454 students in attendance of classes at Northern Illinois University; and the results of Realism, Idealism, Pragmatism, Existentialism, and Phenomenology are displayed showing the leading philosophy among this group to be Phenomenology, followed closely by Existentialism and then by Pragmatism. Realism ranked fourth with very little Idealism being displayed but with some significant differences among some of the groups. (Author)

ED 072018

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

THE PHILOSOPHICAL NATURE OF TEACHERS--GRADUATE AND UNDERGRADUATE

JOHN D. STARKEY
Professor
Northern Illinois University

RITA L. BARR
Graduate Student
Northern Illinois University

SP 006 086

Statement of the Problem

Since educators have long sought some kind of measure by which to identify genuine prospects for the field of teaching, this study was undertaken to work toward the discovery of that measure or productive tool. Most educators have agreed that a teacher's attitude in the classroom and her choice of teaching method are directly related to her philosophical beliefs. (2) These beliefs naturally involve the individual's concept of reality, goodness, and beauty, with the concomitant influence on attitudes toward learning and motivation theories. (4)

Thus, a logical starting place seemed to be an analysis of philosophical beliefs of students in teacher preparation classes.

The following questions were considered basic to the study:

1. What are the philosophical beliefs of these students (present and future teachers)?
2. Do these beliefs vary with different levels of teaching? Or with different levels of education on the part of the teacher?
3. Does philosophical belief provide any basis for counseling of teachers in the colleges of education?

Exploration of the whole area of teacher philosophy, it seemed, would have to begin with an examination of the students' attitudes toward three basic questions, which every individual must answer for himself and which define his basic attitude toward life, toward himself, and toward his fellow man. These basic questions can be reduced to the following:

1. What is reality?

2. What is truth?

3. What is good?

It was further assumed that answers an individual makes to these basic questions would ally him with one of the five basic philosophies: Realism, Idealism, Pragmatism, Existentialism, and Phenomenology as exemplified by The Ames Philosophical Belief Inventory: (1)

> The Realist,[6] for our purposes, sees the world as materialistic, a world of things, and sees truth as observable fact to be sought out. Likewise, he sees moral good as measured by the law of nature and beauty as the reflection of nature.
>
> The Idealist[6] on the other hand, considers mind the central reality, finding truth, beauty, and goodness in a Supreme Being, a God. He often accepts knowledge on the basis of faith.
>
> The Pragmatist views the world as a place of experimentation and change, with truth being "what works", and with goodness and beauty being whatever they are determined to be by the public.
>
> The Existentialist considers the universe a world of existing, in which man makes himself by his own actions. Truth, then, is in his choosing; as goodness is in the anguish of freedom, and beauty is in the individual's revolt from the public norm.
>
> The Phenomenologist then, sees the world as the interaction of man with his environment. He views truth, beauty, and goodness from the interactive viewpoint of the self.

Method

The Ames Philosophical Belief Inventory, which measures the above-named philosophical beliefs, was administered to a selected sample at Northern Illinois University in the first semester of the 1970-71 school year. The questionaires were distributed to 451 selected students in the School of Education at Northern Illinois University governed by those enrolled randomly in current classes.

TABLE I

DISTRIBUTION OF QUESTIONNAIRES

	Undergraduate	Graduate	Total
Elementary	60	153	213
Secondary	174	64	238

The hypothesis was established that there would be no significant differences between the groups so isolated. No attempt was made to contrast the beliefs of these students with those of

students in other courses of study or with those of the general public. Rather, the effort was made to probe the attitudes of only this group of students and, if possible, to correlate these beliefs with their educational backgrounds and with their field of teaching, whether elementary or secondary.

The Ames Philosophical Belief Inventory is a forced choice instrument with the possibility of a range from 0 - 100 in any one philosophical belief but with a total score of 250.

Results

Among undergraduates, as shown in Table III, students in secondary education compared with those in elementary show a significant difference (at the .001 level) in the area of Realism. Those enrolled in secondary programs indicate a belief in Realism at a higher mean than those in elementary.

For this same group of undergraduates there is also significance (at the .01 level) in the extent to which the students in elementary show a greater belief in Existentialism than do those in secondary. Somewhat less significant is the relative difference in belief in Idealism, where the elementary undergraduates show a somewhat higher mean than do the secondary undergraduates.

However, a more significant difference appears in the two means relating to Phenomenological beliefs, where undergraduate students show a somewhat higher mean score than do the secondary undergraduate students in education.

A somewhat different profile emerges when graduate and undergraduate students in elementary education are compared, as in Table IV. Here there is no significant difference for three of the types of beliefs for which the survey instrument tested: Idealism, Pragmatism, and Phenomenology. In the areas of Realism and Existentialism, however, there are noteworthy difference. Graduate students of elementary education show a distinctly higher mean score for Realism (37.26) than undergraduate students (28.5). On the

Table II

A COMPARISON OF PHILOSOPHICAL BELIEFS OF STUDENTS
IN THE COLLEGE OF EDUCATION

N=451

	Philosophy	Mean	Standard Deviation
Elem. Und.	Realism	28.500	13.384
	Idealism	25.700	15.216
	Pragmatism	63.433	9.285
	Existentialism	67.200	13.050
	Phenomenology	66.133	9.946
Sec. Und.	Realism	40.034	5.951
	Idealism	22.908	13.767
	Pragmatism	63.374	13.169
	Existentialism	60.529	15.937
	Phenomenology	62.724	12.843
Elem. Grad.	Realism	37.268	16.153
	Idealism	24.804	11.947
	Pragmatism	61.922	11.385
	Existentialism	59.778	13.932
	Phenomenology	65.745	10.995
Sec. Grad.	Realism	40.453	16.295
	Idealism	26.125	12.323
	Pragmatism	59.344	10.726
	Existentialism	60.969	14.971
	Phenomenology	62.172	11.994

Table III

A COMPARISON OF PHILOSOPHICAL BELIEFS
OF SECONDARY UNDERGRADUATES AND ELEMENTARY UNDERGRADUATES

N = 234

		Mean	S. D.*	P. V. E.** T. Value	Significance
Sec. Und.	Realism	40.035	15.951	5.02	.001
Elem. Und.		28.500	13.384		
Sec. Und.	Idealism	22.908	13.767	-1.32	.20
Elem. Und.		25.700	15.216		
Sec. Und.	Pragmatism	62.374	13.169	-0.58	not signif.
Elem. Und.		63.433	9.285		
Sec. Und.	Existentialism	60.529	15.937	-2.92	.01
Elem. Und.		67.200	13.050		
Sec. Und.	Phenomenology	62.724	12.843	-1.87	.10
Elem. Und.		66.133	9.946		

* Standard Deviation

** Pooled Variance Estimate

Table IV

A COMPARISON OF PHILOSOPHICAL BELIEFS
OF ELEMENTARY GRADUATE AND ELEMENTARY UNDERGRADUATE

N = 213

		Mean	S. D.	P. V. E. T Value	Significance
Elem. Grad.	Realism	37.268	16.153	3.73	.001
Elem. Und.		28.500	13.384		
Elem. Grad.	Idealism	24.804	11.947	-0.45	not signif.
Elem. Und.		25.700	15.216		
Elem. Grad.	Pragmatism	61.922	11.385	-0.92	not signif.
Elem. Und.		63.433	9.285		
Elem. Grad.	Existentialism	59.778	13.932	-3.56	.001
Elem. Und.		67.200	13.050		
Elem. Grad.	Phenomenology	65.745	10.995	-0.24	not signif.
Elem. Und.		66.133	9.946		

other hand, the belief in Existentialism, with a high level of significance, falls at a lower mean for graduate students than for undergraduate students in elementary education.

In Table V, which compares secondary graduates and elementary undergraduates, the data are significant in all beliefs except that of Idealism. The greatest significance here arises from a comparison on the basis of belief in Realism. Here the higher mean for secondary graduates is significant at the level of .001. If somewhat less significance, but still with statistical importance, are the differences for these two groups in adherence to Pragmatism, Existentialism, and Phenomenology. The scores for the belief in Pragmatism and Existentialism show the higher mean for elementary undergraduate as compared with secondary graduate, while the scores for Existentialism show the higher mean. The same is true of the scores for Phenomenology which also indicate higher mean for the elementary undergraduate group as compared with the mean for the secondary graduate group.

Some interesting changes show up in the statistics now, in Table VI, when the comparison is made between elementary graduate and secondary undergraduate. The most significant difference appears to be in the area of Phenomenology, where the elementary graduate student mean is significantly higher than the secondary undergraduate mean. Somewhat less significant, yet still statistically reliable, are the differences shown in beliefs of a Realistic and of an Idealistic nature. These figures show elementary graduates

Table V

A COMPARISON OF PHILOSOPHICAL BELIEFS
OF SECONDARY GRADUATE AND ELEMENTARY UNDERGRADUATE

N = 124

		Mean	S. D.	P. V. E. T Value	Significance
Sec. Grad.	Realism	40.453	16.295	4.45	.001
Elem. Und.		28.500	13.384		
Sec. Grad.	Idealism	26.125	12.323	0.17	none
Elem. Und.		25.700	15.216		
Sec. Grad.	Pragmatism	59.344	10.726	-2.26	.05
Elem. Und.		63.433	9.285		
Sec. Grad.	Existentialism	60.969	14.971	-2.46	.02
Elem. Und.		67.200	13.050		
Sec. Grad.	Phenomenology	62.172	11.994	-1.99	.05
Elem. Und.		66.133	9.946		

Table VI

A COMPARISON OF PHILOSOPHICAL BELIEFS
OF ELEMENTARY GRADUATE AND SECONDARY UNDERGRADUATE

N = 327

		Mean	S. D.	P. V. E. T Value	Significance
Elem. Grad. Sec. Und.	Realism	37.268 40.035	16.153 15.951	-1.56	.20
Elem. Grad. Sec. Und.	Idealism	24.804 22.908	11.947 13.767	1.32	.20
Elem. Grad. Sec. Und.	Pragmatism	61.922 62.374	11.385 13.169	-0.33	not signif.
Elem. Grad. Sec. Und.	Existentialism	59.778 60.529	13.932 15.937	-0.45	not signif.
Elem. Grad. Sec. Und.	Phenomenology	65.745 62.724	10.995 12.843	2.27	.05

tending to score lower in Realism and higher in Idealism than do secondary undergraduates. The data for these groups show no significant differences in Pragmatic or Existential beliefs.

Table VII focuses on the Belief Inventory scores of graduate and undergraduate students who are in secondary studies. Here the findings are without statistical significance in the areas of Realism, Existentialism, and Phenomenology. In Idealism and Pragmatism, however, the data become significant at the .10 level and show the graduate secondary students significantly higher in Idealism and significantly lower in Pragmatism.

When the data are compared for the two groups of graduate students only (Table VIII), there is seen to be no significant difference in the belief findings with reference to Idealism and Existentialism. On Realism, though, the mean scores of the secondary graduates can be seen to be significantly higher than the mean scores of the elementary graduates, with a level of significance at .20. Equally significant are the scores on Pragmatism, although here the higher mean is established for the elementary graduates. Most significant of all for the two groups of graduate students is the difference in mean scores as related to Phenomenology: graduate students in elementary studies show a significantly higher belief in Phenomenology than do their fellow graduate students in secondary studies. The mean

Table VII

A COMPARISON OF PHILOSOPHICAL BELIEFS
OF SECONDARY GRADUATE AND SECONDARY UNDERGRADUATE

N = 238

		Mean	S. D.	P. V. E. T Value	Significance
Sec. Grad.	Realism	40.453	16.295	0.18	not signif.
Sec. Und.		40.035	15.951		
Sec. Grad.	Idealism	26.125	12.323	1.64	.10
Sec. Und.		22.908	13.767		
Sec. Grad.	Pragmatism	59.344	10.726	-1.65	.10
Sec. Und.		62.374	13.169		
Sec. Grad.	Existentialism	60.969	14.971	0.19	not signif.
Sec. Und.		60.529	15.937		
Sec. Grad.	Phenomenology	62.172	11.994	-0.30	not signif.
Sec. Und.		62.724	12.843		

Table VIII

A COMPARISON OF PHILOSOPHICAL BELIEFS
OF SECONDARY GRADUATE AND ELEMENTARY GRADUATE

N = 217

		Mean	S. D.	P. V. E. T Value	Significance
Sec. Grad.	Realism	40.453	16.295	1.32	.20
Elem. Grad.		37.268	16.153		
Sec. Grad.	Idealism	26.125	12.323	0.74	not signif.
Elem. Grad		24.804	11.947		
Sec. Grad.	Pragmatism	59.344	10.726	-1.55	.20
Elem. Grad.		61.922	11.385		
Sec. Grad.	Existentialism	60.969	14.971	0.56	not signif.
Elem. Grad.		59.778	13.932		
Sec. Grad.	Phenomenology	62.172	11.994	-2.12	.05
Elem. Grad.		65.745	10.995		

scores for the former group falls at 65.75, that of the latter at 62.17, with a level of significance at .05.

The data show a consistent significance at the .20 level, when the basis of comparison becomes the sampling of graduate scores as against the sampling of undergraduate, as shown in Table IX. Here the graduates are shown to have a greater belief in Realism, in Idealism, and in Phenomenology, and a lesser belief in the philosophies of Pragmatism and Existentialism.

Finally, in Table X, the comparison on the basis of teaching level (elementary or secondary studies) shows some more markedly significant differences in belief. The mean scores for those in elementary studies are measurably higher for Idealism, Pragmatism, and Existentialism (.20 level); but they have a much higher significance in the reflection of Phenomenological belief: 65.85 as compared with a mean of 62.58 for those in secondary studies, with a significance level of .01. Even greater significance attaches to the comparison of beliefs in Realism, where the decidedly higher mean is scored for the secondaries: 40.15, as compared with 34.80 for the elementaries, significant at the level of .001.

Table IX

A COMPARISON OF PHILOSOPHICAL BELIEFS
OF GRADUATE AND UNDERGRADUATE STUDENTS

(Includes both elementary and secondary)

N = 451

		Mean	S. D.	P. V. E. T Value	Significance
Grad.	Realism	38.207	16.222	0.74	.20
Und.		27.076	16.117		
Grad.	Idealism	25.194	12.045	1.26	.20
Und.		23.624	14.172		
Grad.	Pragmatism	61.161	11.232	-1.34	.20
Und.		62.645	12.280		
Grad.	Existentialism	60.129	14.222	-1.50	.20
Und.		62.239	15.499		
Grad.	Phenomenology	64.691	11.388	0.98	.20
Und.		63.598	12.237		

Table X

A COMPARISON OF STUDENTS OF ELEMENTARY EDUCATION AND STUDENTS OF SECONDARY EDUCATION

(Includes both graduate and undergraduate)

N = 451

		Mean	S. D.	P. V. E. T Value	Significance
Sec.	Realism	40.147	16.011	3.55	.001
Elem.		34.798	15.892		
Sec.	Idealism	23.773	13.445	-1.03	.20
Elem.		25.046	12.940		
Sec.	Pragmatism	61.559	12.609	-0.71	.20
Elem.		62.347	10.835		
Sec.	Existentialism	60.647	15.653	-0.87	.20
Elem.		61.869	15.063		
Sec.	Phenomenology	62.576	12.598	-2.96	.01
Elem.		65.854	10.688		

Conclusions

The results of this study at Northern Illinois University indicate a rejection of the Null hypothesis that there are no differences in philosophical belief among the four groups of education students who were included in this study. While the foregoing charts and tables show some areas in which there is little significant variation in philosophical beliefs, they reveal also several differences among the groups which are highly significant. For example, students in secondary teaching show consistently higher scores on Realism than do those in elementary. (.001 level) Similarly, graduate students compared with undergraduate students in both categories show scores on higher Realism, and the differences are significant at the .20 level when comparing graduate secondary students with undergraduate elementary students. Thus, the data seem to be saying that among these graduate students and among the students in secondary education there is a greater inclination toward some of the concepts of Realism, which are:

1. Knowledge is based on observation and experience;
2. There are final and ultimate truths;
3. Faith, authoritarianism, and intuition and instruments of knowledge.
4. Truth is an observable fact.

Less dramatic differences are observable in the responses relating to Idealism, although a significant difference (.10) emerges from a comparison of students in secondary education, the graduates showing a greater belief than the undergraduates in these tenets of Idealism:

1. There exists a superior, spiritual being;
2. There are final and ultimate truths;
3. Faith, authoritarianism, and intuition are instruments of knowledge;
4. Man has a spiritual soul.
5. Nothing exists outside the mind (as in Plato's philosophy).

In the area of Pragmatism, there appears to be a greater allegiance to this philosophy among undergraduates, particularly those in elementary studies. Their beliefs, like those of John Dewey, would include some of the following:

1. Education is learning how to think, not what to think;
2. Truths change; values change; truth is what works today;
3. Human nature is fluid and plastic;
4. Problem solving is the key to learning;
5. All ideas should be scientifically tested.

Repeatedly, the scores show Existentialism to have wider acceptance among undergraduate students, particularly those in elementary studies. Among the ideas that these students, (along with Kierkegaard, Tillich, and Sartre), would support are the following:

1. Man is free to direct his own life;
2. Man is responsible for setting his own goals;
3. Man makes himself; he is the sum of his own actions;
4. Both reality and truth are made by the individual as he chooses them to be.

Belief in Phenomenology, now, seems to be stronger among graduate students than among undergraduate, and stronger among students in elementary education than those in second-

ary. These graduate students, particularly those in elementary education, would subscribe to the ideas of Kurt Lewin, Arno Luker and Combs, who tend to think in these terms:

1. Man seeks to maintain his own equilibrium;
2. Man has need satisfactions: identification, mastery of things, security;
3. Phenomena are the only sources of knowledge, the only realities;
4. Learning is a change of perception.

All of these conclusions are presented graphically in Table XI, which charts the differential findings of this study, showing for each significant difference the level at which this significance obtains. Thus at a glance, the significant Realism of graduates in secondary can be seen in clear contrast with the Existentialism of undergraduates in elementary studies. Other findings of the study likewise can be seen here in close juxtaposition.

Naturally, there is a temptation to read many meanings into these data; but, of course, the conclusions cannot be extended to areas beyond the scope of this study, where the evidence of validity has not yet been demonstrated. Therefore, it must be left to further studies to determine which factors--age, background, university course of studies, personality--might be the critical variables which account for the differences which have emerged in this study. Hopefully, some day further research will enable colleges of education to correllate tests with criteria for effective teaching, which might then be used predictively in the counseling of students in the field of teacher education.

TABLE XI

COMPILATION OF ALL TWO-GROUP COMPARISONS*

	Realism	Idealism	Pragmatism	Existentialism	Phenomenology
Undergraduate					
Elementary	-	-	Not	+(.01)	+(.10)
Secondary	+(.001)	+(.20)	signif.	-	-
Graduate					
Elementary	-	Not	+(.20)	Not	+(.05)
Secondary	+(.20)	signif.	-	signif.	-
Elementary					
Undergrad.	-	Not	Not	+(.001)	Not
Graduate	+(.001)	signif.	signif.	-	signif.
Secondary					
Undergrad.	Not	-	+(.10)	Not	Not
Graduate	signif.	+(.10)	-	signif.	signif.
Other:					
Sec. Grad.	+(.001)	Not	-	-	-
El. Undergrad.	-	signif.	+(.05)	+(.02)	+(.05)
El. Grad.	-	+(.20)	Not	Not	+(.05)
Sec. Undergrad.	+(.20)	-	signif.	signif.	-
Graduate	+(.20)	+(.20)	-	-	+(.20)
Undergrad.	-	-	+(.20)	+(.20)	-
Secondary	+(.001)	-	-	-	-
Elementary	-	+(.20)	+(.20)	+(.20)	+(.01)

*Showing the higher-scoring group of each pair and the level at which the difference becomes significant.

-The lower of the two groups compared.

+The higher of the two groups compared.

BIBLIOGRAPHY

1. Ames Philosophical Belief Inventory, Kenneth Ames, Gonzaga University, Spokane Washington.

2. Bode, Boyd H., How We Learn. New York; Heath, 1940.

3. Cook, Walter W., Carroll H. Leeds, and Robert Callis. Minnesota Teacher Attitude Inventory. The Psychological Corp., New York; 1951.

4. Hilgard, Ernest R., and Gordon H. Bower. Theories of Learning, 3rd Ed. New York: Appleton-Century Crofts, 1966.

5. Hyman, Ronald T. Ways of Teaching. J. B. Lippincott, New York: 1970.

6. Morris, Van Cleve. Five Basic Philosophies.

THE PHILOSOPHICAL NATURE OF TEACHERS--GRADUATE AND UNDERGRADUATE

ABSTRACT

This study of the nature of the philosophical beliefs of graduate and undergraduate teacher education students compares secondary and elementary undergraduates, as well as secondary and elementary graduates as to ontology, epistemology, and axiology. The Ames Philosophical Belief Inventory was administered to 454 students in attendance of classes at Northern Illinois University and the results of Realism, Idealism, Pragmatism, Existentialism, and Phenomenology are displayed showing the leading philosophy among this group to be Phenomenology, followed closely Existentialism and then by Pragmatism. Realism ranked fourth with very little Idealism being displayed but with some significant differences between some of the groups.